

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

REMARKS

In view of both the amendments presented above and the following discussion, the Applicants submit that none of the claims now pending in the application is anticipated under the provisions of 35 USC § 102 or obvious under the provisions of 35 USC § 103. Thus, the Applicants believe that all of these claims are now in allowable form.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, the Examiner should telephone Mr. Peter L. Michaelson, Esq. at (732) 542-7800 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Specification amendment

A minor amendment has been made to correct an inadvertent typographical error that remained in the specification.

Status of claims

Claim 14 was amended to more precisely recite the invention than it had earlier.

Claim 15 has been amended to correct an antecedent error.

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

Dependent claims 21-27 are new.

No claims have been canceled.

Rejections

A. Rejection under 35 USC § 102(e)

The Examiner has rejected claim 14, as it stood prior to this amendment, under the provisions of 35 USC § 102(e) as being anticipated by the teachings in the Spaur et al patent (United States patent 6,122,514 issued to C. W. Spaur et al on September 19, 2000). With respect to claim 14, as it now stands, this rejection is respectfully traversed.

Specifically, the Examiner takes the position that Figure 1 in the Spaur et al patent discloses all features recited in the body of prior claim 14, and in particular measuring a time period during which a predefined number of packets, e.g., two, that belong to a common connection are received or transmitted through that connection. As described therein, packet jitter refers to variations in inter-packet receive times, i.e., differences in times of reception (arrival times) between successively received packets. While the Examiner concedes that the Spaur et al patent does not disclose that the system it teaches is used for charging for packet load per connection -- as recited in the preamble of claim 14, the preamble is

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

not given any weight in the body of the claim, and hence ignored.

In response, the Applicants have now amended claim 14 to, inter alia, positively recite in the body of the claim that the claimed system includes a billing system for formulating a charge for use of the packet connection based on the measured time -- a feature clearly absent, as the Examiner readily concedes, from the teachings of the Spaur et al patent.

As such, this addition to claim 14 unquestionably distinguishes the claimed invention from the teachings of the Spaur et al patent.

Claim 14, as it now stands, contains a suitable recitation directed to this, among other, distinguishing aspects of the present invention. This claim recites as follows with this particular distinguishing recitation indicated by a bolded typeface:

"A system for charging, in a packet based telecommunication network, the packet load per connection, the system comprising:

a measuring device for measuring a time period during which a predefined number (N) of packets that belong to a common packet connection are received or transmitted during an entire session and through the connection so as to define a measured time period (t), wherein the predefined number is less than a total number of packets carried over the connection during the entire session; and

a billing system for formulating a charge for use

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

of the connection in response to the measured time period (t)."

Accordingly, claim 14 is not identically disclosed by the teachings in the Spaur et al patent. Consequently, this claim is patentable under the provisions of 35 USC § 102(e).

This rejection should now be withdrawn.

B. Rejections under 35 USC § 103

The Examiner has posed two rejections under the provisions of 35 USC § 103, each being directed to a different group of the Applicants' pending dependent claims and based on the combined teachings of a different corresponding group of applied references.

Specifically, the Examiner has rejected:

- a) dependent claims 15 and 18 as being obvious over the teachings in the Spaur et al patent taken in view of those in the Corneliussen patent (United States patent 6,819,672 issued to K. S. B. Corneliussen on November 16, 2004); and
- b) claims 16, 17, 19 and 20 as being obvious over the teachings in the Spaur et al patent taken in view of the teachings in the Corneliussen patent and further in view of the teachings in the Saari et al patent (United States patent 6,338,046 issued to J. I. Saari et al on January 8, 2002).

Inasmuch as all the rejected claims are dependent claims, the Applicants will address these rejections together and principally in the context of independent claim 14, as it now stands, and from which all of rejected claims 15-20 depend. In that context, this rejection is respectfully traversed.

Since the Examiner bases all these rejections on the teachings of the Spaur et al patent, the Applicant will first elucidate the teachings of the Spaur et al patent, then discuss the present invention and why the teachings of the Spaur et al patent are irrelevant to the present invention. Thereafter, the Applicants will turn to the Corneliussen and Saari et al patents, and finally address why the presently claimed invention is not obvious over the teachings in these three applied patents.

The Spaur et al patent, as discussed in, e.g., col. 2, line 3 et seq and col. 4, line 50 et seq thereof, is directed to a methodology for selecting a particular packet connection (channel) from amongst several such connections based on assessing channel parameters of all such connections against application-based (desired) requirements for a needed channel. To do so and as described in, e.g., col. 2, line 57 et seq, a link selector (14 shown in FIG. 1) accesses a link database (54 also shown in FIG. 1) that stores network channel parameters. These parameters essentially characterize or define current capabilities of each channel. In light of the requirements of given application, these parameters for each channel are

assessed by comparing each such parameter against its corresponding application requirement. Should any such comparison reveal that a channel can not satisfy an application requirement, then that particular channel is no longer considered. Illustrative channel parameters are listed in col. 7, line 41 through col. 8, line 3. Illustrative application requirements are listed in col. 8, line 17 through col. 8, line 61. As the Examiner correctly notes, both lists contain "packet jitter" which in the context of a channel parameter (see col. 7, lines 51-52) is the "anticipated variation in inter-packet receive times", and in the context of an application requirement (see col. 8, line 32-33) is "a profile of values related to variations in inter-packet receive times that can be tolerated". The Examiner is also correct in noting that jitter may be determined by measuring variations in time differences between arrival times of successive packets.

For those channels which remain and hence are deemed acceptable, a suitability analysis is then conducted to determine which particular channel would be best suited for the application and hence is to be selected for use. As described in col. 3, line 23 et seq and col. 8, line 62 et seq, this analysis involves calculating a weighted vector of the channel parameters where each such requirement is weighted by a factor (stored within database 38 shown in FIG. 1) associated with the corresponding application requirement. As indicated by illustrative equations in col. 11, lines 41-43 and lines 51-53, a suitability value is simply determined as a

sum of the weighted channel parameter values. The channel then having the highest suitability value is selected for use.

As the Examiner undoubtedly appreciates, this patent is directed to channel selection, not to charging for use of that channel to carry packet traffic. In fact, nowhere does this patent contain any teachings whatsoever, whether express or implied, that have any bearing at all on how a user should be charged for packet transport through that channel. Hence, this patent has absolutely nothing to do with and has no bearing on charging for use of a network channel.

In sharp contrast and as discussed in the Applicants' prior amendment mailed December 12, 2005, the present invention is directed to an approach for determining a charge for transporting bursty network traffic through a packet, specifically ATM, connection. This approach, as now claimed, relies on measuring a duration of time (t) required for a specific (i.e., "fixed") number (N) of packets to be received or transmitted during a session and through the connection, where that number is less than the total number of packets that transit through the connection during the session, and then basing the charge on the measured time. To conserve transmission bandwidth needed to carry such measurements, these results may be aggregated over multiple time durations (which each duration being determined by the passage of the fixed number of packets) prior to

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

transmission of the measured data to the billing system.
See. e.g., page 6, line 11 et seq of the substitute
specification (mailed June 27, 2005) which expressly
states:

"...[I]t is conversely also possible to measure the
duration of time between the reception or transmission
of a specific number of data units."

and in page 8, line 17 et seq of that substitute
specification (as previously amended):

"A calculation device 4 calculates per connection a
ratio between a number of arrived cells and a number
of clock pulses and passes this ratio on to a billing
system 5. According to the invention, this ratio is
not calculated over the entire time that a connection
is active but over smaller periods. There are therein
two possibilities, viz. (per connection) starting from
a fixed measurement period T and counting the number n
of cells arriving in that period, wherein the
ratio $r = n/T$, or starting from a fixed number of
cells N and measuring the time t which is needed for
the arriving of those cells, wherein $r = N/t$."

While the Examiner's correctly views that the
Spaur et al patent discloses the concept of measuring
inter-packet arrival time, the patent does so for the
specific purpose of its use, as a channel parameter, in
channel selection.

Moreover, while the Examiner also correctly views
that the Spaur et al patent discloses channel setup cost
and cost per packet (see col. 7, lines 61 through col. 8,
line 3), these factors are also discussed in the context of

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

being channel parameters that characterize a channel for its suitability for use with a given application. In that regard, consider col. 1, line 46 et seq which expressly states:

"Important additional factors or parameters to be taken into account as part of the *network channel selection process* relate to the cost of transfer including factors such as the network channel cost per packet and any channel setup cost. In view of these many parameters that can be considered *when a channel is selected*, the selection process for obtaining a desired or optimum network channel can be a complicated task." [emphasis added].

As the Examiner can appreciate, these costs are pre-defined and fixed. While this patent teaches that certain channel parameters may dynamically vary, these costs are apparently not among them. Reference is made to col. 10, line 1 et seq which expressly states:

"The network channels 34a-34n also have dynamic characteristics or properties associated therewith. That is, during use or operation of a particular network channel, *certain parameters can be checked to determine whether or not each is meeting its expected operating function. For example, retransmit requests per packet (packet loss), round trip packet time (packet jitter) and signal strength are measured.* The results of such measurements are maintained in the communication link database 54 using the link controller/monitor 50 that obtains such measured information from the protocol stack 26." [emphasis added]

From this express statement, it is plainly evident that the network costs (channel cost per packet, and channel setup

cost) envisioned by the Spaur patent are simply fixed parameters (presumably numeric quantities) associated with a given channel, without any dynamic variation, i.e. they are not based on any dynamically occurring measurements. In marked contrast, the results of the Applicants' present invention are essentially dynamic charges for the use of a network connection based on real-time measurements of packet traffic carried through that connection -- a concept totally missing from the Spaur et al teachings.

Given the purpose to which the Spaur et al patent is directed -- namely channel selection, it is unquestionably beyond any reasonable doubt that a person of skill in the art when faced with the problem -- as the present Applicants are -- of how to best charge for use of a network connection, such as an ATM connection and particularly during instances of bursty transmissions, would just NOT turn to the Spaur et al patent for any relevant teachings. Not only are such teachings not present, whether express or implicit -- as discussed above, but also, in light of just how divergent the problem addressed by the Spaur et al patent is from that faced by the present Applicants, that person would not even expect any such teachings to be present, even if only implicitly. If the Examiner believes that the Applicants' view is mistaken, then the Applicants respectfully request that the Examiner expressly point to any such teachings in the Spaur et al patent.

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

The Examiner also bases these rejections on the teachings of the teachings of the Corneliusen and Saari et al patents.

The Corneliusen patent teaches a methodology for calculating a monetary charge for a packet connection. However, this methodology widely differs from that which the present Applicants teach.

In particular and as the Applicants have described in their prior amendment mailed December 6, 2005, and as described in col. 2, line 47 et seq and col. 3, line 40 et seq of the Corneliusen patent, this methodology essentially involves measuring, through a first timer, the time interval (Δt_n) that occurs between two successively arriving packets (packets n and $n+1$) and updating a second timer (T_{tot}) with the next value of Δt_n when each new packet ($n+1$) arrives. Hence, during an active connection, the second timer accumulates the total connection time, T_{tot} , as a series of Δt_n values ultimately occurring between the first and last packets transmitted through a connection from the instant the connection starts until it terminates. This concept is mathematically given by the equation shown in col. 3, line 51 et seq where m is the "number of arrived packets", i.e., the total packet count for the connection that occurred during time period T_{tot} . Hence, while the connection occurs, both the time and the packet count are measured and incrementally accumulated, with the final values of both variables then being defined (T_{tot} and m , respectively) only after all the packets have passed

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

through the connection. In that regard, the specification explicitly states in col. 4, line 26 et seq:

"With this invention, the total time for a given connection is the time from the first to the last packet. At any point in time when the equipment is asked for the duration of the connection, the duration provides the time from the first to last packet."

Thus, as the Examiner can readily appreciate, the technique taught by the Corneliussen patent basically relies on measuring: (a) the total time required for a packet connection, and (b) the total count of all the packets carried through that connection, and then basing a connection charge thereon. The charge is thus based on the total time, from start to finish, of the connection and total packet count during that connection, but not merely on any intermediate time period that occurs during the connection itself.

In their December 5, 2006 amendment, the Applicants laid out the test promulgated by recent Federal Circuit case law for assessing obviousness of an invention based on combined teachings of multiple references. That discussion, while in the context of the patent references applied by the Examiner in her obviousness rejection set forth in the prior office action mailed June 9, 2006, applies with equal vigor and validity here with respect to the Spaur et al and Corneliussen patents here. The teachings of these two applied patents are even more divergent than the patent references patents upon which the

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

Examiner based her obviousness rejection in that prior action.

The Applicants begin by noting, as they previously did, that the United States Circuit Court of Appeals for the Federal Circuit has repeatedly, rigorously and steadfastly articulated its view that a conclusion of obviousness can not be based on hindsight, but must be the product of a suggestion, motivation or teaching in the prior art that would have led a person of ordinary skill to select the references and combine them in the way that would produce the claimed invention. See, *Karsten Manufacturing Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 58 USPQ2d 1286, 1293 (Fed. Cir. 2001) citing its prior decision in *Northern Telecom v. Datapoint* 908 F.2d 931, 934, 15 USPQ2d 1321, 1323 (Fed. Cir. 1990) where the Court stated: "It is insufficient that the prior art disclosed the components of the patented device, either separately or used in other combinations; there must be some teaching, suggestion, or incentive to make the combination made by the inventor."

Along these lines, in *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d. 1367, 62 USPQ2d 1917, 1922 (Fed. Cir. 2002), the Court stated:

"Determination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention." *ATD Corp. v. Lydall, Inc.* 159 F.3d 534, 546, 48 USPQ2d 1321, 1329 (Fed. Cir. 1998). There must be a teaching or suggestion within the

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

prior art, within the nature of the problem to be solved, or within the general knowledge of a person of ordinary skill in the field of the invention, to look to particular sources, to select particular elements, and to combine them as combined by the inventor. See *Ruiz v. A.B. Chance Co.* 234 F.3d 654, 665, 57 USPQ2d 1161, 1167 (Fed. Cir. 2000) ... *Heidelberger Druckmaschinen AG v. Hantscho Commercial Prods., Inc.* 21 F.3d 1068, 1072, 30 USPQ2d 1377, 1379 (Fed. Cir. 1994) ('When the patented invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination.')

See, also, *Vulcan Engineering Co. v. FATA Aluminum Inc.*, 278 F.3d 1366, 61 USPQ2d 1545, 1548 (Fed. Cir. 2002) and particularly *Cardiac Pacemakers Inc. v. St. Jude Medical Inc.*, 381 F.3d 1371, 72 USPQ2d 1333, 1336 (Fed. Cir. 2004) where the Court expressly stated:

"Prior knowledge in the field of the invention must be supported by tangible teachings of reference materials, and the suggestion to combine references must not be derived by hindsight from knowledge of the invention itself. See *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1578-79 [42 USPQ2d 1378] (Fed. Cir. 1997) ('However, the record must provide a teaching, suggestion, or reason to substitute computer-controlled values for the system of hoses in the prior art. The absence of such a suggestion to combine is dispositive in an obviousness determination.');

Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1143 [227 USPQ 543] (Fed. Cir. 1985) ('When prior art references require selective combination by the court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself.')

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

The Federal Circuit in *Beckson Marine Inc. v. NFM Inc.*, 292 F.3d 718, 63 USPQ2d 1031, 1037 (Fed. Cir. 2002) again articulated three sources through which a motivation or suggestion could be found, citing to its prior decision in *In re Rouffet*, 149 F.2d 1350, 1357, 47 USPQ2d 1453, 1456-68 (Fed. Cir. 1998):

"This suggestion or motivation need not be expressly stated. ... but may be shown by reference to the prior art itself, to the nature of the problem solved by the claimed invention, or to the knowledge of one of ordinary skill in the art."

Now, under the Court's mandated analysis, does a suggestion or motivation exist in the Spaur et al and Corneliussen patents to support the combination posed by the Examiner, or as shown by from the nature of the problem solved by the claimed invention or by knowledge of one of ordinary skill in the art? NO. No such motivation or suggestion exists at all. Why?

First, consider the applied art itself. Both the Spaur et al and Corneliussen patents, while being directed to use with packet systems -- which is the extent of their commonality, widely differ in the problems each faces, so much so that one problem has absolutely nothing in common with the other. The Spaur et al patent, as discussed above, faces the problem of selecting a channel from amongst several then available to transport packets for use by a particular application. The Corneliussen patent teaches charging for network usage. What relevance does each of these problems have with the other? None.

Perhaps, the Examiner conjectured, without fully comprehending the disparity between these two references and the implication, that one skilled in the art would combine these references simply because, as the Examiner reasons, "one would be motivated to do so in order to utilize the interarrival time interval to charge the user; a user must be charged more if the user sends a certain number of packets in a shorter time period since it is a faster connection". Yet, where does this motivation to combine exist? Certainly not in the Spaur et al patent as it is utterly oblivious to the problem of how to charge for use of an ATM connection. As to the Corneliussen patent, it teaches expressly away from basing a charge on inter-arrival time, as that patent explicitly teaches the concept of basing a charge on the TOTAL connection time and the TOTAL packet count occurring during an entire network connection.

Measuring time and packet counts for an entire connection, i.e., from start to finish, is strikingly different and basically opposite to an approach of measuring time required during that connection for a predetermined number of packets to transit over the connection regardless of when that connection actually started or finished.

Why would a person of ordinary skill in the art, when faced with one problem, i.e., how to charge for a packet connection -- as was the case with the present

invention, consult one relevant reference, the Corneliusen patent, which teaches one approach, and then turn to another reference, the Spaur et al patent, that is totally unrelated and directed to a markedly different and irrelevant problem than in the former reference and which ultimately teaches a strikingly opposite approach in solving its own problem? Simply stated, that person would not. It simply defies all credibility to think otherwise.

Hence, contrary to the Examiner's view, no express motivation or implied suggestion exists in these references to one of skill in the art, when faced with the Applicants' problem, to combine the teachings of the Spaur et al and Corneliusen patents to arrive at the combination posed by the Examiner. The teachings of these references, as divergent as they are, simply do not support any such motivation or suggestion, regardless of how implicit the latter might be, and, if anything, strongly discourage their combination.

Given that no motivation or suggestion exists in the applied art to combine the teachings as the Examiner has done, then it stands to reason that only one conclusion can explain it: the Examiner's combination is just a piecemeal combination again predicated on hindsight. It is eminently clear to the Applicants that, but for having considered the present invention and its inventive teachings of basing ATM network charges on a time period for a predetermined number of packets to either be transmitted or received, the Examiner would never have been

led to the combination which she now posits. The teachings of the applied art simply fall far short of where the Examiner opines they are.

Now, as to whether the nature of the problem solved by the Applicants' invention itself might motivate the combined teachings or suggest it, there is no evidence of record to support this premise. In essence and as discussed on pages 1-3 of the present specification, the Applicants face the problem of how to charge for use of a packet connection, whether in an ATM or IP network, in a manner reflective of performance delivered by the network and performance experienced by a customer, but one which incentivizes a customer to even out its packet (cell) traffic over the duration of the connection and allows the network to match its assigned capacity to that then needed by the customer. The generality of this problem statement provides no express motivation or implied suggestion, to combine the teachings of the Spaur et al and Corneliussen patents, let alone in an effort to yield the Applicants' inventive solution: basing a charge for service on the time required for a predetermined number of packets to transit through the network, i.e., to be transmitted or received. The combined teachings, let alone the Applicants' inventive solution, are clearly not apparent, let alone deducible, from that problem statement.

Furthermore, with respect to the last source of motivation or suggestion to combine as delineated by the Federal Circuit, there is no evidence of record, and

certainly nothing credible -- at least the Examiner has not produced any and the Applicants are not aware of any -- to the effect that a person of ordinary skill in the art, based solely on that person's knowledge of the art, would think to combine the teachings of the Spaur et al and Corneliussen patents either by way of some express motivation or an implied suggestion in the art. In fact, given the divergence of the problems to which each patent is directed, the contrary is far more likely to be true. That person, being familiar with conventional techniques for charging for packet transport such as that taught by the Corneliussen patent, would simply have no reason to look to any technique for packet channel selection, such as that taught by the Spaur et al patent, to gain any practical insight in solving a problem concerning how to properly charge for ATM network service. These aspects are just too disparate to support any such cross-over.

Therefore, in the absence of a suitable motivation or suggestion, present in the applied references, in the problem addressed by the Applicants or in the general knowledge in the art, to combine the teachings of these references as the Examiner has done, the Examiner's attempted combination must fail under the analysis mandated by the Federal Circuit.

As the Applicants stated in their December 5th amendment, they are not laying any claim to the general concept of measuring, in an ATM network, the arrival time of a predetermined number of packets, but rather to a very

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

specific inventive application of a narrower concept -- one that is just not taught, disclosed or suggested in the art: charging for use of a packet network connection based on a measured time period during which a predefined number of packets are carried through the connection during a session, where that number is less than the total number of packets carried over the connection during the entire session.

Hence, it has remained for the Applicants and only the Applicants to have discovered this particular inventive application of that concept.

Now, would the incorporation of the teachings of the Saari et al patent change this result? No. Why?

As discussed in the Applicants' prior amendment mailed December 6, 2005, the Saari et al patent also teaches a technique for measuring connection time for use, particularly in an ATM network, in determining an appropriate charge for that connection. This technique is so substantially different from the Applicants' present invention that it is basically of no real relevance.

Specifically, the technique taught by the Saari et al patent relies on initiating a connection to an ATM node by sending a billing cell, containing connection information, to that node. That specific node then measures the time required for all ATM data cells in the connection to be received at that node. The last cell in

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

the connection is a terminate billing cell which drops the connection to that node. Once the connection to that node is terminated, the node computes, using, in part, information in the billing cell, the incremental cost associated use of that node. This cost accounts for the connection time through that node as well as the amount of data transferred through that node. Thereafter, to transfer the data from that node to a next successive node in a path through the network, the former node will establish a connection to the latter node and generate and transmit a billing cell to the latter node. The billing cell will contain the total cost of the connection thus far. That next node once it has received all the data will, in turn, calculate an incremental connection cost and add that cost to the information in the billing cell it received and then pass the resulting accumulated cost, in a new billing cell, to a next successive node in a path through the network, and so on, until the last node in the path has been reached. The last node will transfer its accumulated billing information to a network billing system in order to bill the entire cost of the connection. See, e.g., col. 3, line 42 et seq; col. 5, line 56 et seq; and col. 6, lines 29-32 of the Saari et al patent.

The Examiner recognizes, as the only potentially relevant aspect of the Saari et al patent and, from the Applicants' perspective, the reason for its citation, its teaching that ATM system cells can contain connection information which defines desired network capacity or priority requested for a connection by a user, or capacity

or priority assigned to that connection by a telecommunications system. However, this teaching has no bearing on measuring the time duration (t) required for a fixed number of packets (N) to be received at or transmitted by a network connection. In that regard, while the duration is clearly influenced by the priority and network bandwidth (network capacity) which the network assigns to that connection -- which collectively influence the speed through which the network will transfer packets for that connection end-to-end through the network, the mere act of including that information within an ATM system cell, as the Saari et al patent teaches, will not, by itself, dictate the duration. Rather, the then-existing operational characteristics of the network will.

As discussed in considerable detail above, no motivation or suggestion exists that supports the Examiner's attempted combination of the teachings in the Spaur et al and Corneliussen patents -- given the widely disparate nature of the respective problems and solutions taught by these two patents. Therefore, any purported combination of the teachings of these two patents along with those of the Saari et al patent would be equally suspect and hence, under the analysis laid out by the Federal Circuit, similarly baseless.

Now, given that the Saari et al patent and the Corneliussen patents are both directed to billing for ATM connections, then, reason dictates, that one of skill might look to combine the teachings of these two patents. If

that person were to do so, the resulting technique would still rely on measuring, for an ATM connection and as taught the Corneliussen patent, the total time required for the entire connection (however long that connection is from start to finish) along with counting all the packets (cells) that constituted that connection. System packets, as taught by the Saari et al patent, used to establish that connection would contain connection information, including priority and capacity parameters. Such a system falls far short of and uses a measurement technique that lies directly opposite to that taught by the present Applicants, i.e., to fix the number of packets and then measure a time duration needed for that number of packets to be received or transmitted through the packet connection.

As noted above, the Applicants have now amended claim 14 to further define their present invention than that claim previously did. In that regard, this claim now: (a) recites that the predefined number (N) of packets on which a time measurement is taken during a particular session is less than the total packet count during that session -- which is directly opposite to the approach taught by the Saari et al patent; and (b) contains a positive structural recitation -- also not shown or suggested in the applied art -- that a charge for use of a packet connection is based on the time measurement. This claim now states as follows with those recitations being shown below in a bolded type:

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

"A system for charging, in a packet based telecommunication network, the packet load per connection, the system comprising:

a measuring device for measuring a time period during which a predefined number (N) of packets that belong to a common packet connection are received or transmitted during an entire session and through the connection so as to define a measured time period (t), wherein the predefined number is less than a total number of packets carried over the connection during the entire session; and

a billing system for formulating a charge for use of the connection in response to the measured time period (t)."

Thus, the Applicants submit that claim 14, as it now stands, is not rendered obvious in view of the teachings in the Spaur et al, Corneliussen and Saari et al patents, whether taken singly or in any combinations, including those suggested by the Examiner. Consequently, claim 14 is patentable under the provisions of 35 USC § 103.

Each of dependent claims 15-20 depends from claim 14 and recites further distinguishing aspects of the present invention over those recited in claim 14. Accordingly, each of these dependent claims is patentable over the teachings in these applied references for the same exact reasons set forth above regarding claim 14. Consequently, the Applicants submit that each of these dependent claims is likewise patentable under the provisions of 35 USC § 103.

Hence, these rejections should also now be withdrawn.

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007

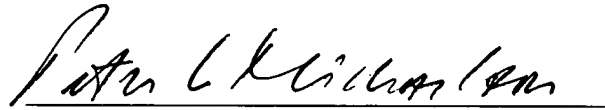
Conclusion

Thus, the Applicants submit that none of the claims, presently in the application, is anticipated under the provisions of 35 USC § 102 or obvious under the provisions of 35 USC § 103.

Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

Respectfully submitted,

March 23, 2007


Peter L. Michaelson, Attorney
Customer No. 007265
Reg. No. 30,090
(732) 542-7800

MICHAELSON & ASSOCIATES
Counselors at Law
P.O. Box 8489
Red Bank, New Jersey 07701-8489

Appl. No. 09/674,347
Amdt. dated March 23, 2007
Reply to Office Action of Jan. 4, 2007



CERTIFICATE OF MAILING under 37 C.F.R. 1.8(a)

I hereby certify that this correspondence is being deposited on **March 26, 2007** with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

A handwritten signature in cursive script, appearing to read "Peter L. Kilduff".

Signature

30,090

Reg. No.